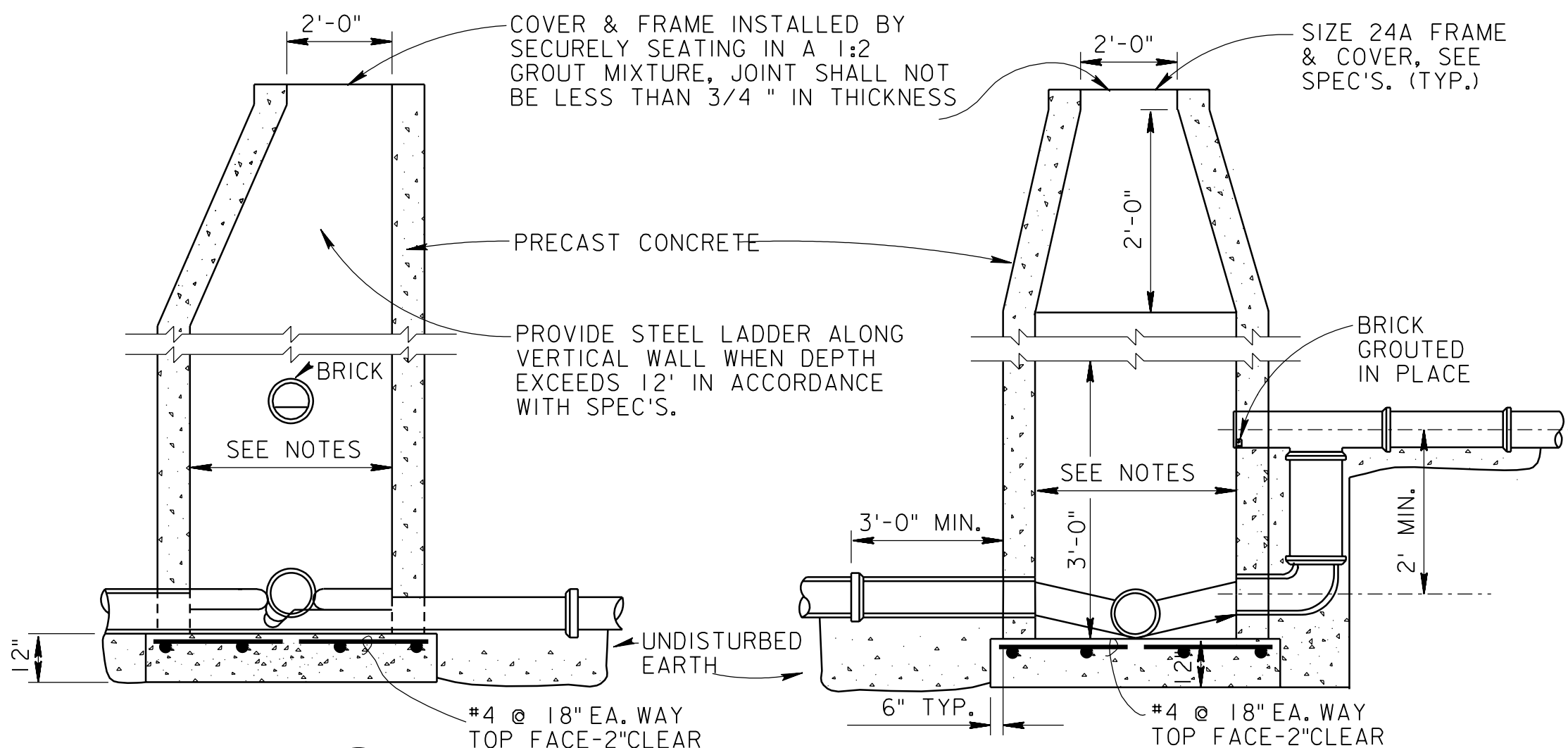
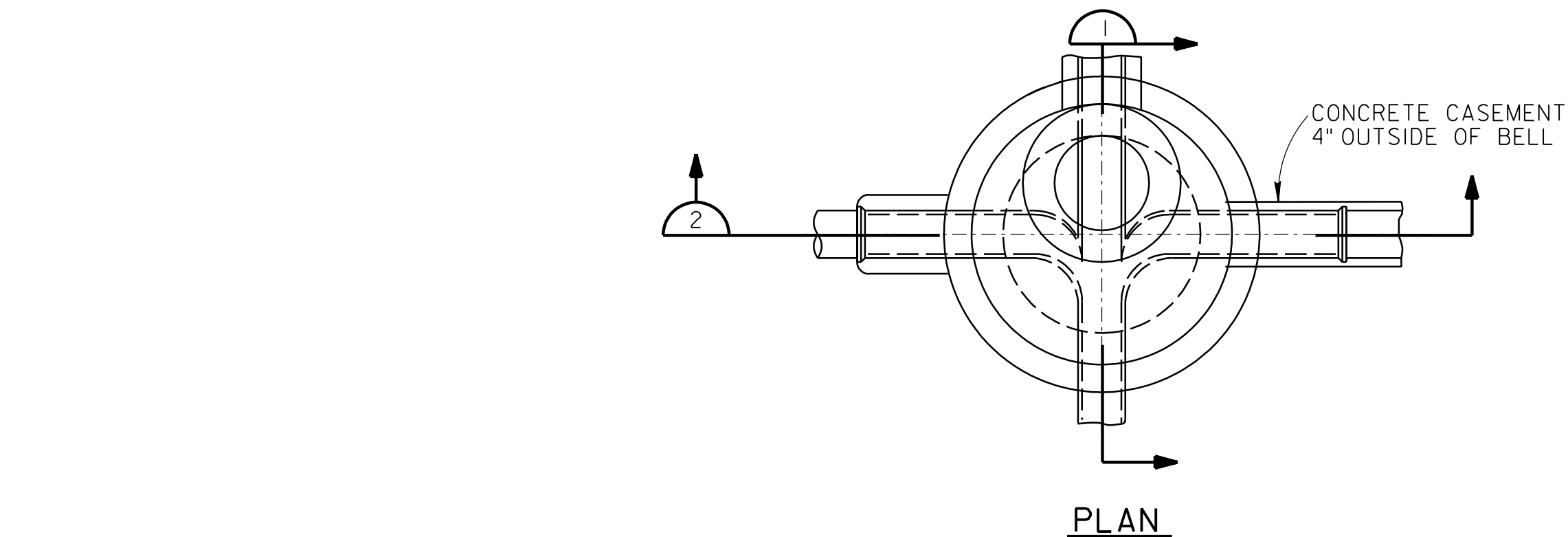
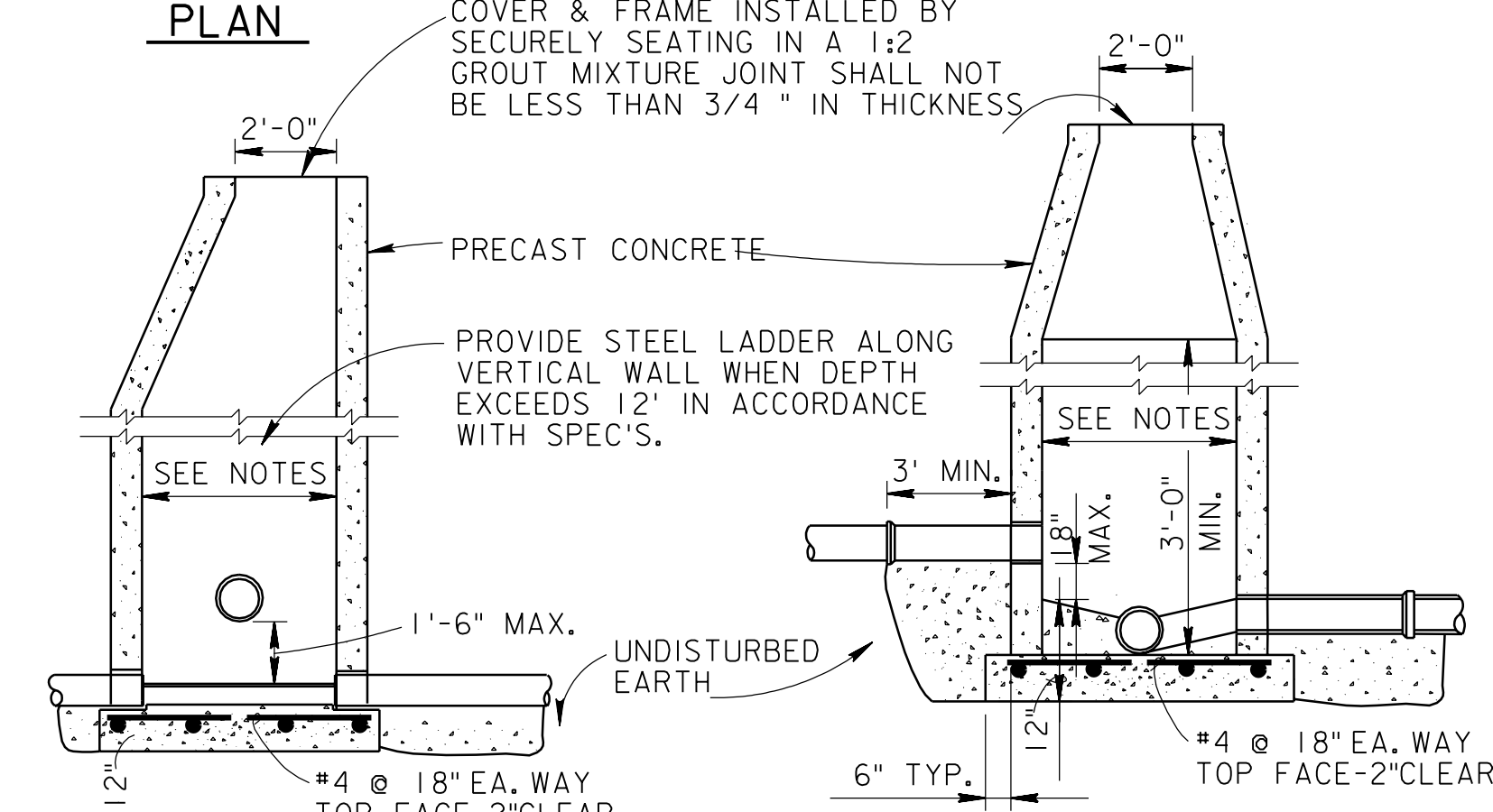
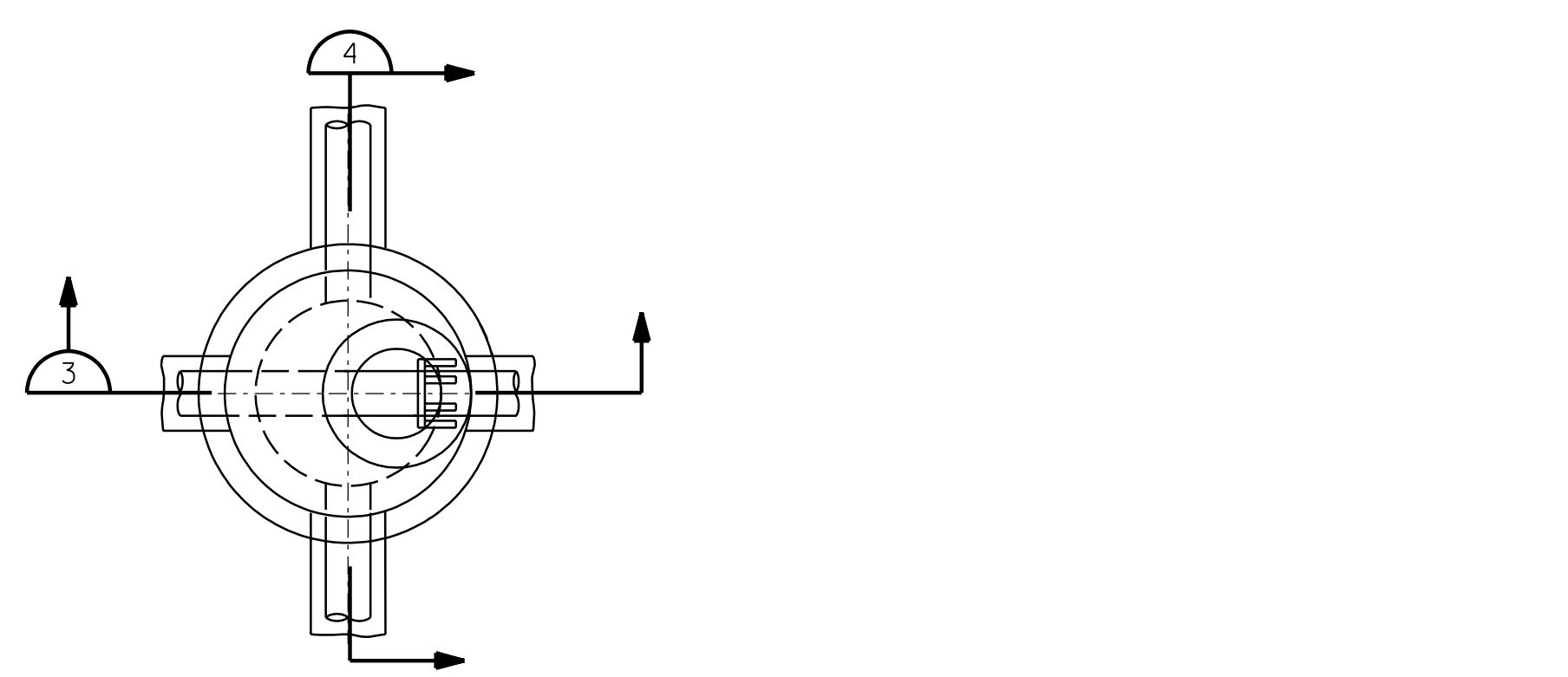


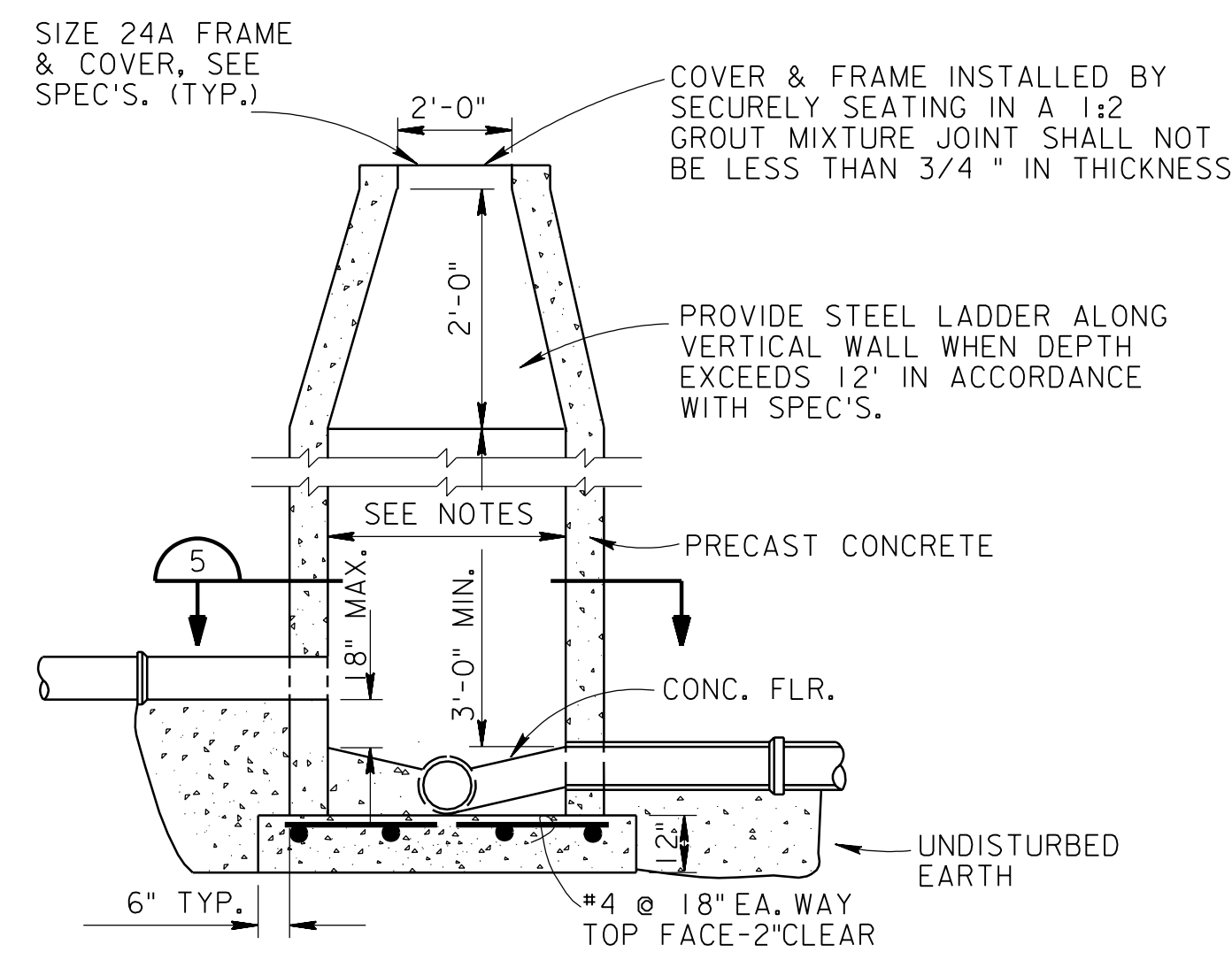
SECTION
STANDARD SHALLOW MANHOLE
NO SCALE



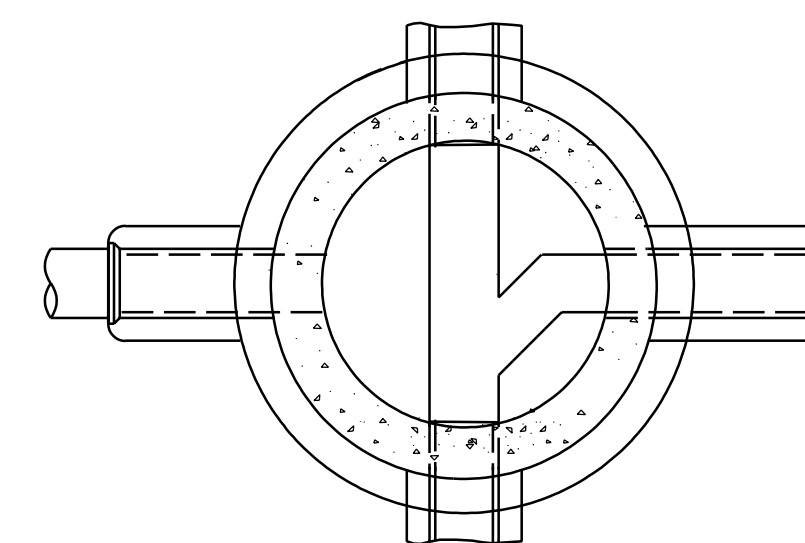
SECTION 1
SECTION 2
TYPICAL PRECAST ECCENTRIC DROP-MANHOLE DETAILS
NO SCALE



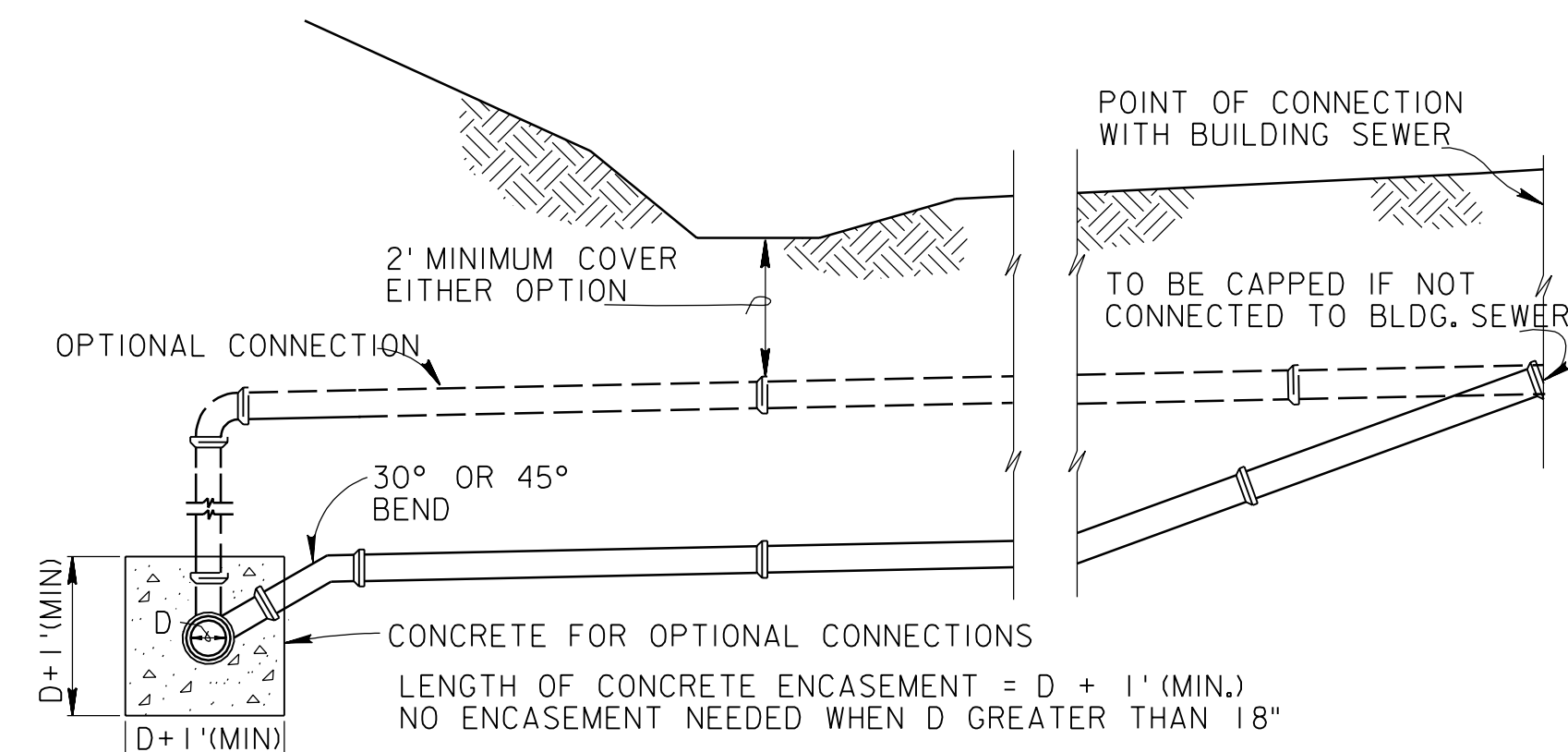
SECTION 3
SECTION 4
TYPICAL PRECAST CONCENTRIC DROP-MANHOLE DETAILS
NO SCALE



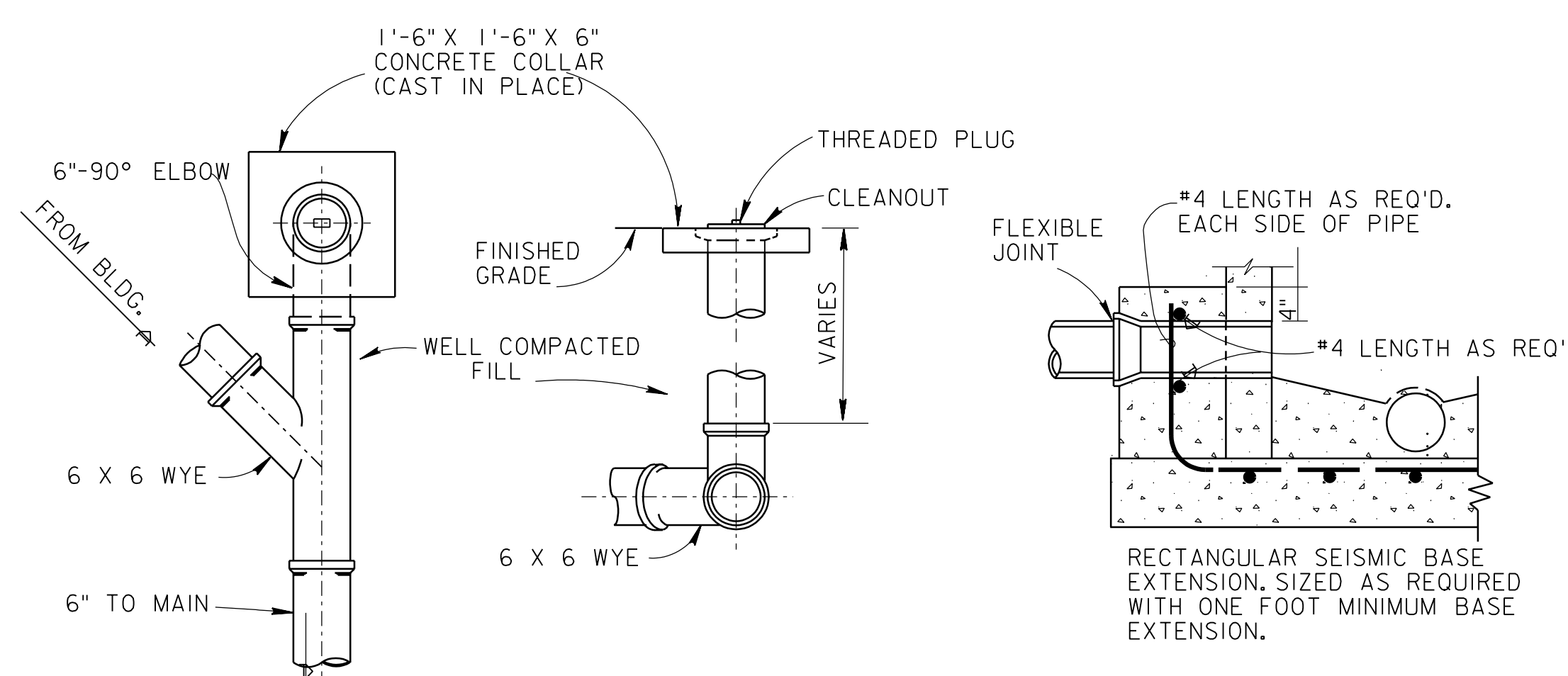
TYPICAL SECTION WITH
USUAL CONNECTIONS



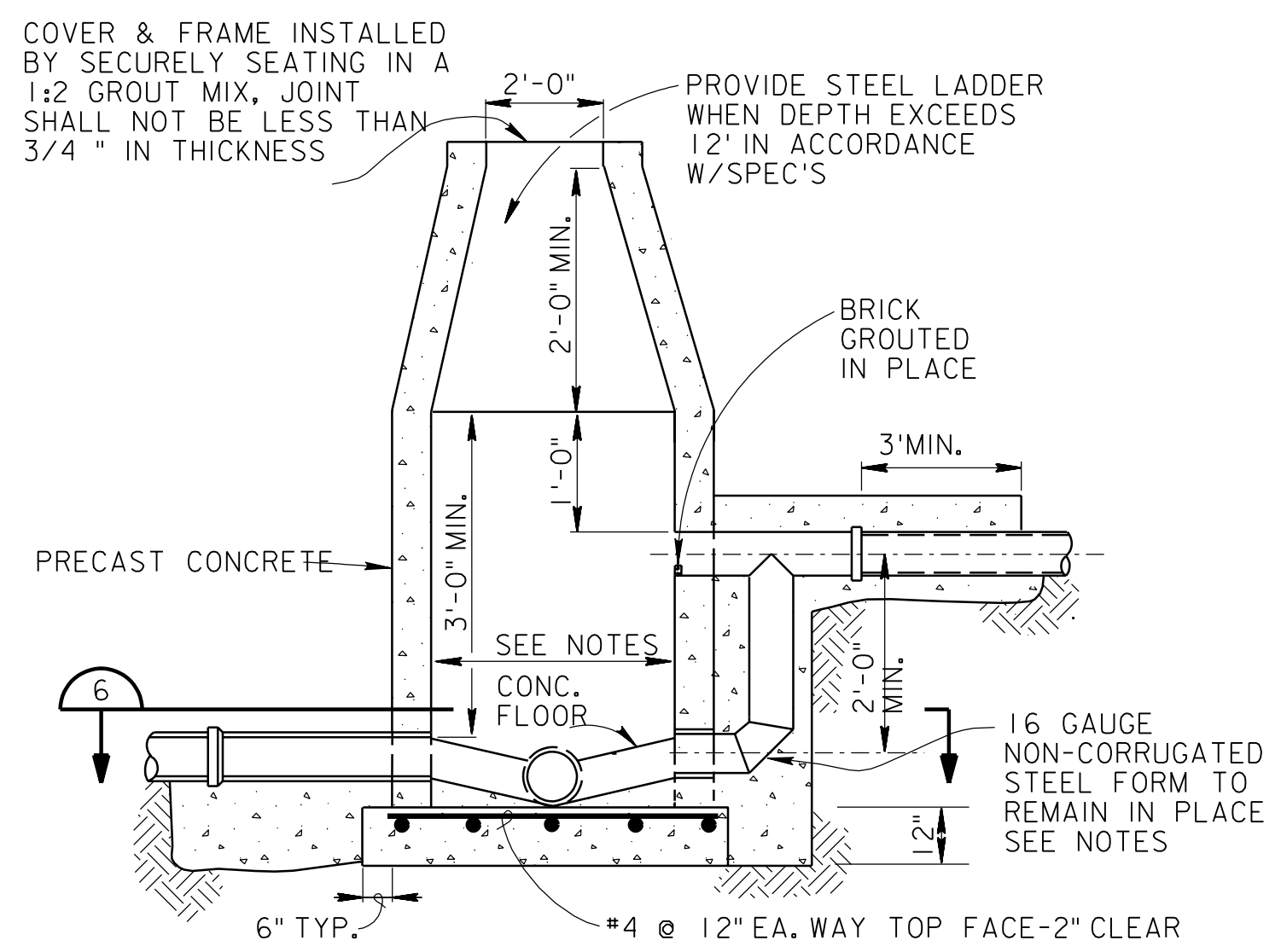
SECTION 5
TYPICAL PRECAST
CONCENTRIC MANHOLE DETAILS
NO SCALE



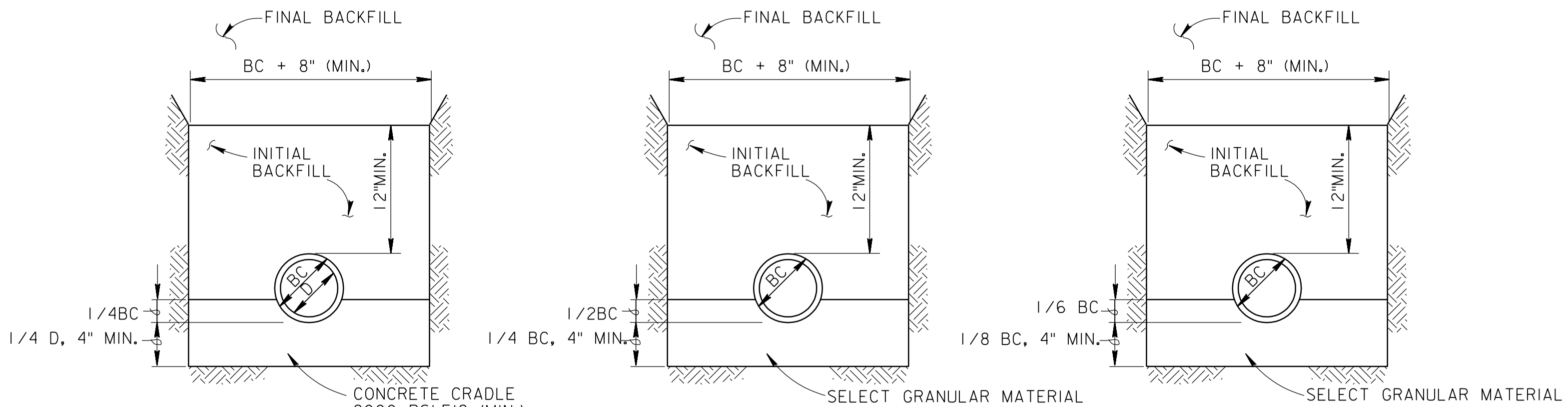
STANDARD SANITARY SEWER BUILDING CONNECTIONS
NO SCALE



MANHOLE SEISMIC DETAIL
NO SCALE



TYPICAL SECTION WITH DROP CONNECTIONS

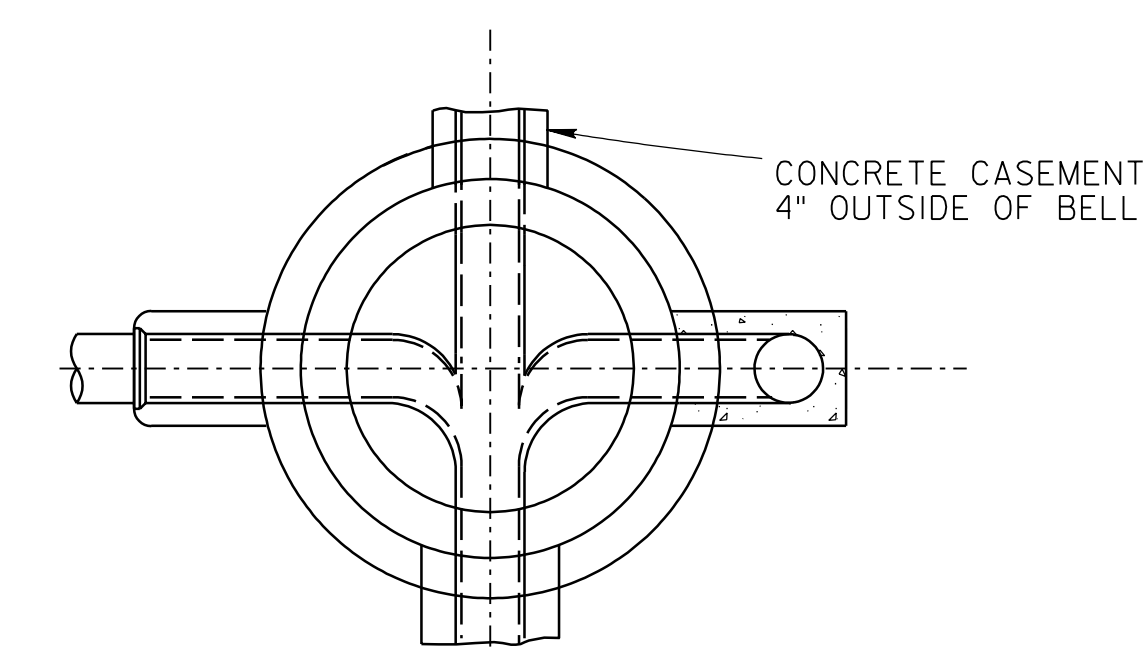


CLASS A
CLASS B
CLASS C

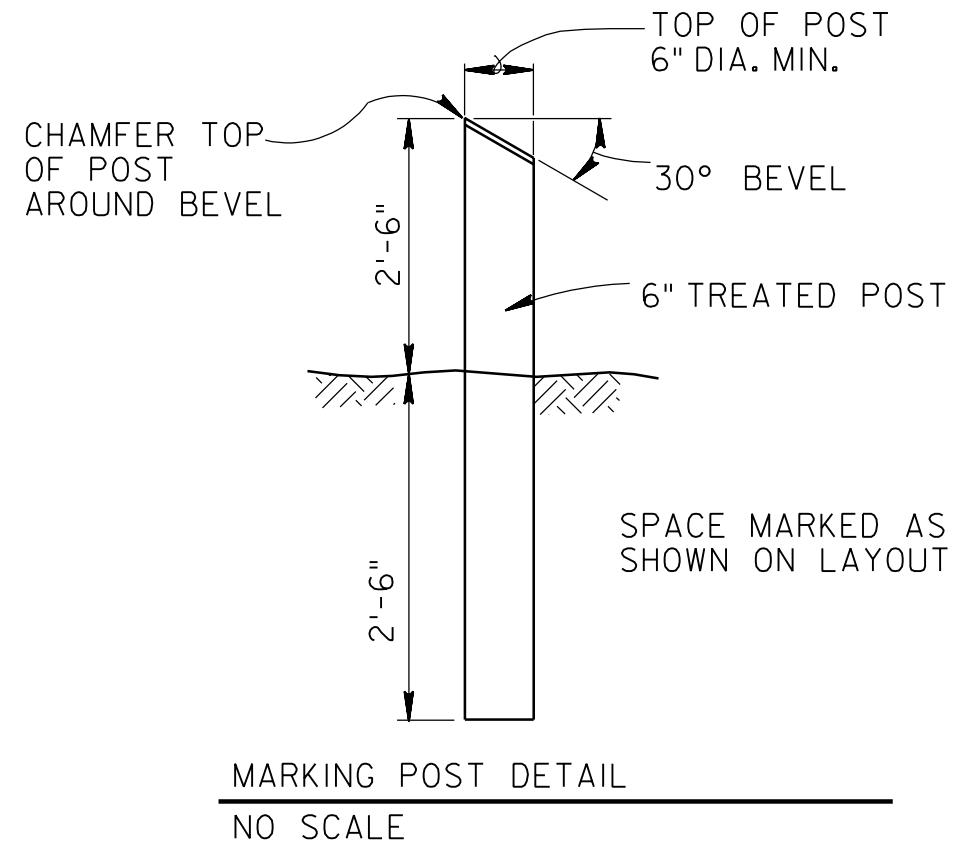
SEE SPECS. FOR COMPACTION
MATERIAL REQUIREMENTS

BEDDING DETAILS
NO SCALE

INITIAL BACKFILL	
PIPE MATERIAL	MAX. PARTICLE SIZE
PLASTIC	1/2"
COATED OR WRAPPED	1/2"
OTHER	1-1/2"



SECTION 6
TYPICAL PRECAST CONCENTRIC
DROP-MANHOLE DETAILS
NO SCALE



MARKING POST DETAIL
NO SCALE

- NOTES: STANDARD MANHOLES.
1. INSIDE DIAMETER OF MANHOLES TO BE 4'-0" FOR PIPE THROUGH 24", 5'-0" FOR PIPE 27" THROUGH 36", AND 6'-0" FOR PIPE 42" THROUGH 48" IN SIZE UNLESS OTHERWISE REQUIRED.
 2. THIS SHEET DOES NOT APPLY TO SEWERS OVER 48" IN SIZE, OR TO SEWERS OVER 24" IN SIZE WHICH REQUIRE A CHANGE IN DIRECTION OF FLOW.
 3. ANY MATERIAL EXCAVATED BENEATH PIPE ENTERING OR LEAVING MANHOLES SHALL BE REPLACED WITH CONCRETE. SUCH CONCRETE FILL SHALL EXTEND TO THE CENTER OF THE PIPE FOR A DISTANCE OF AT LEAST 3'-0" FROM FACE OF MANHOLE AND SHALL TERMINATE AT A BELL.
 4. FITTINGS FOR DROP-MANHOLE CONNECTIONS MAY BE OF STANDARD SEWER PIPE MATERIALS OTHER THAN THAT OF THE INCOMING PIPE IF APPROVED TRANSITION IS PROVIDED.
 5. 16 GAUGE STEEL FORMS MAY BE USED AT DROP-MANHOLE CONNECTION WHEN STANDARD FITTINGS ARE NOT READILY AVAILABLE.
 6. SEISMIC DETAIL TO BE USED IN SEISMIC ZONES 2, 3 & 4.

\$\$ - THINK VALUE ENGINEERING - \$\$			
Revisions			
Symbol	Descriptions	Date	Approved
U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS OMAHA, NEBRASKA			
Designed by:	SITE NAME		SITE LOCATION
Drawn by:	OMAHA DISTRICT DESIGN GUIDE		
Checked by:	SANITARY SEWER DETAILS		
Reviewed by:	Plot Scale Ratio:	Date:	Sheet reference number:
	Design File:		
Submitted by:	Spec. No.: DACA 45	Drawing Code:	
	Contract No.: DACA 45		
Chief:	Section	X	U4.06